

## Balancing Chemical Equations

Balance the following equations; the subscripts are correct.

1.  $\text{Al} + \text{N}_2 \rightarrow \text{AlN}$
2.  $\text{NaCl} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{HCl}$
3.  $\text{Al} + \text{CuSO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{Cu}$
4.  $\text{P} + \text{O}_2 \rightarrow \text{P}_2\text{O}_5$
5.  $\text{Fe}(\text{OH})_3 \rightarrow \text{Fe}_2\text{O}_3 + \text{H}_2\text{O}$
6.  $\text{Li} + \text{O}_2 \rightarrow \text{Li}_2\text{O}$
7.  $\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3$
8.  $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
9.  $\text{P}_4 + \text{Br}_2 \rightarrow \text{PBr}_3$
10.  $\text{KNO}_3 \rightarrow \text{KNO}_2 + \text{O}_2$
11.  $\text{Na} + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
12.  $\text{Pb}(\text{NO}_3)_2 + \text{KI} \rightarrow \text{KNO}_3 + \text{PbI}_2$
13.  $\text{C}_2\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
14.  $\text{Zn} + \text{AgCl} \rightarrow \text{ZnCl}_2 + \text{Ag}$
15.  $\text{O}_3 \rightarrow \text{O}_2$
16.  $\text{CH}_4 + \text{Br}_2 \rightarrow \text{CBr}_4 + \text{HBr}$
17.  $\text{S}_8 + \text{O}_2 \rightarrow \text{SO}_2$
18.  $\text{CaCl}_2 + \text{Na}_2\text{CO}_3 \rightarrow \text{CaCO}_3 + \text{NaCl}$
19.  $\text{Cd} + \text{AgNO}_3 \rightarrow \text{Cd}(\text{NO}_3)_2 + \text{Ag}$
20.  $\text{Be}_2\text{C} + \text{H}_2\text{O} \rightarrow \text{Be}(\text{OH})_2 + \text{CH}_4$